

87. PUFFINUS GRAVIS O'Reilly.

Ushant. When just off Ushant and Le Conquet, and *en route* for Molène on September 17th, six Great Shearwaters were seen, either singly or in pairs, fairly close to the steamer. Off the Casquets, on September 30th, one was seen along with the Manx Shearwaters.

XVI.—*On new Species of Birds obtained in Kan-su by M. Berezovsky.* By H. E. DRESSER and E. DELMAR MORGAN.

IN 1884 Mr. M. Berezovsky went as ornithologist on the expedition led by Mr. G. N. Potanin to explore North-west China, and when the expedition returned, thanks to the generosity of Mr. W. P. Sukatscheff, he was able to continue his explorations for another year. The result of his scientific labours has been embodied in a work by Messrs. Berezovsky and Bianchi, in Russian, entitled 'Ptitzi Kansuskago Puteshestviya G. N. Potanina' (St. Petersburg, 1891), or 'The Birds of the Potanin Expedition through the Province of Kan-su and the adjacent Country.' In this work six new species of birds are described, but the descriptions, being in Russian only, are unavailable to most Western ornithologists. Consequently, at my suggestion, Mr. E. Delmar Morgan has kindly translated these descriptions, and forwarded his translation to me to revise for the press. It proved, however, to be too long for publication in that form in 'The Ibis,' and I have therefore undertaken to condense it and bring it into such shape as to enable the Editors of this Journal to accept it. Fortunately, of these six species there are co-types of two (*Trochalopteron sukatschewi* and *Pœcile davidi*) in the Tring Museum, which have been placed at my disposal by the Hon. Walter Rothschild for examination and description. The descriptions of the other four species are translated from the Russian.—
H. E. D.

TROCHALOPTERUM SUKATSCHEWI (*op. cit.* p. 59, pl. i. fig. 1).

♂ *ad.* Upper parts browner and darker than in *T. ellioti*, the rump rufous, the inner secondaries with conspicuous white patches on the terminal portions of the inner web, the outer primaries slate-blue on the outer web, and not golden yellow as in *T. ellioti*; tail as in that species, but without any golden yellow on any of the rectrices; a narrow line across the base of the upper mandible, lores and a broad line surrounding a large white patch below the eye deep black; underparts as in *T. ellioti*, but washed with vinous, and the lower abdomen and under tail-coverts pale rufous-orange. Tail much rounded, the outermost feathers fully 2.0 mm. shorter than the central ones. Culmen 0.9 mm., wing 4.1, tail 5.85, tarsus 1.55. Iris dark cinnamon; legs pale rose-grey; bill dark horn, yellowish green at the base.

Specimens were obtained at the village of Satani in October, November, and December, the village of Chago in November and December, and the village of Yo-dzam-pu in July. The measurements of these specimens vary as follows:—♂. Total length 2.80–3.10 mm., extent 312–320, wing 99–108, bill 23–28, tarsus 37–39, hind toe with claw 19.5–22, tail 143–160. ♀. Total length 270–293 mm., extent 305–320, wing 97–106, bill 22–26, tarsus 38–39, hind toe with claw 20–21, tail 132–158.

Mr. Berezovsky met with this species in the districts of Si-gu-chen and Ming-djau. It is a rare bird, inhabiting the more elevated portions of the mountains, where conifer-woods abound, especially where there is an undergrowth of bamboo. It was in pairs both winter and summer. It frequents thickets and is always to be met with on the ground, where it digs in the moss and dry leaves in search of food. It roosts on trees, and at sunset the pair call to each other with a loud note.

SUTHORA PRZEWALSKII (*op. cit.* p. 67, pl. ii. fig. 1).

Sexes alike. Crown and nape ash-grey; nasal feathers, lores, and forehead cinnamon-black; from the forehead over

the eye and along the upper edge of the ear-coverts a cinnamon-black band passes, which becomes broader and darker towards the nape; upper part of the back olivaceous grey; lower back, scapulars, rump, and upper tail-coverts dull olive, brighter on the scapulars and rump; region round the eye, edge of gape, chin, throat, and upper breast cinnamon, rather brighter on the centre of the breast and paler below; sides of the neck and breast grey, tinged with cinnamon; flanks, abdomen, crissum, and under tail-coverts dull coloured, brighter on the lower portion; all the upper wing-coverts and the quills dull coloured, with an olivaceous tinge, the inner webs of the median wing-coverts blackish; outer webs of the quills dull coloured, the base of the primaries with a reddish tinge; the inner webs of the primaries and secondaries greyish black, of the tertiaries olivaceous blackish brown; all the quills, except the outermost, with dull light margins, on the primaries only at the base and central part, but on the secondaries and tertiaries on the entire inner web, overlapping to the outer web; under wing-coverts pale dull coloured, axillaries greyish white; tail-feathers olive-grey, with brighter margins to the outer web. Adult female in July, iris brick-red; young male in August yellow-ochre; bill rose-coloured, with the point of the upper mandible white, under mandible with a yellowish tinge; legs bluish grey. Wing rounded, the 6th quill longest, the 1st intermediate between the last and last but one and 22-26 mm. shorter than the 6th, the 2nd 12-15, the 3rd 6-7, the 4th 2-3, the 5th 1 mm. shorter. Tail strongly graduated, the outermost rectrix 48-51 mm., the 3rd 1-15 shorter than the tip of the tail; the four central rectrices nearly equal in length.

Specimens were obtained at the village of Yo-dzam-pu in July and August, at the village of Satani in December. Measurements:—♂. Total length 130 mm., expanse 160, wing 55, beak 8, tarsus 19, hind toe with claw 11, tail 70. ♀. Total length 145 mm., expanse 160, wing 56, beak 8, tarsus 18, hind toe with claw 11, tail 80.

This is a rare bird in Kan-su. Mr. Berezovsky met with it

on only three occasions : once early in June 1886, near Yodzam-pu, in the district of Ming-djau, in the elevated mountains, in thin larch-woods, when a pair were seen perched on the trees, and resembled *Parus major* in habits. He again found it in August near the same village, when a small party, probably a family, were seen on the slope of a steep hill flying from tussock to tussock, and a young, not fully feathered, male was obtained. Lastly, in December of the same year a small flock was seen in the Ta-heh-kau river-gorge, south of the village of Satani, in the district of Si-guchen. They were in a bamboo-thicket at an altitude of about 8000 to 10,000 feet. The specimen here secured was in excellent plumage, though unfortunately the sex could not be determined, and this was the specimen figured.

LARVIVORA OBSCURA (*op. cit.* p. 97, pl. i. fig. 2).

♂ *ad.* Nasal feathers and lores black, this colour continued in a narrow streak halfway over the eye; rest of the crown, nape, upper part and sides of the neck, and the back dark slate-blue, paler in fresh-moulted birds, darker in worn plumage; rump like the back, but greyer; upper tail-coverts black; cheeks, ear-coverts, chin, throat, and breast glossy black; flanks smoke-grey, with a reddish tinge; middle of the abdomen white; crissum and under tail-coverts dirty white, with a reddish tinge; scapulars and lesser wing-coverts like the back; median and larger wing-coverts blackish brown; primaries blackish brown, with external greyish margins, which become white at the base; secondaries and tertiaries blackish brown, washed with dark blue-grey on the outer web and with an indistinct paler margin on the inner web; under wing-coverts pale reddish; the two middle rectrices black, the shafts at the base white; remaining tail-feathers white at the base and otherwise black, the outer feather with the basal third and the 2nd with the basal half white, the 4th white for $\frac{3}{4}$ and the 5th for $\frac{5}{6}$ of the length. Wing rounded, 4th and 5th quills equal in length and longest, the 3rd nearly equal to the 6th, sometimes shorter, sometimes longer, and $1\frac{1}{2}$ to 3 mm. shorter than the

longest quill; the 2nd intermediate between the 7th and 8th, and 10–11 mm. shorter than the longest quill; the 1st rather more than half the length of the 2nd, and 29–32 mm. shorter than the longest quill; upper tail-coverts covering the tail to $\frac{2}{3}$ of its length. Iris very dark; bill black, in shape like that of *L. brunnea* and without bristles on the gape; legs blue-grey.

The female is not known. Only four males were obtained in the Yo-dzam-pu gorge, east of the Ming-djau district. They were all met with in bamboo-thickets at an elevation of 10,000 to 11,000 feet, on the tops of ridges dividing the valleys. On the 2nd August Mr. Berezovsky found four unfledged young on the ground in a bamboo-thicket, which had evidently fallen out of a nest, and shot the male, which was in moult, but it was so nearly dark that he could not wait to secure the female. The song is very flute-like and melodious.

Measurements:—♂. Total length 140–150 mm., expanse 210–240, wing 66–71, bill 15·5–16, tarsus 26–29, tail 51·53.

PECILE HYPERMELÆNA (*op. cit.* p. 112, pl. ii. fig. 2).

Head glossy black, this colour extending wedge-shaped down to the back; back and rump olive-brown, the latter with a sandy tinge; on the sides of the head are white streaks from the base of the bill, passing along the cheeks and ear-coverts and merging into the brown of the back; chin and throat dull black; middle of breast, abdomen, and vent dirty white; sides of the breast dark olive-brown; flanks sandy brown; scapulars and upper wing-coverts coloured like the back; quills blackish grey, the inner tertiaries and the margins of the other quills olive-grey; underparts of the quills grey, with whitish margins to the inner webs; under wing-coverts and axillaries light buff; rectrices dark grey, with olive margins, which become grey towards the tips; iris dark; bill black, with paler edges; tarsus lead-grey: 4th, 5th, and 6th quills nearly equal and longest; 3rd nearly equal to or barely longer than the 7th, and less by 2 mm.

than the longest quill; the 2nd equal to the 9th, about 8 mm. shorter than the 3rd, and 10 mm. shorter than the longest quill; 1st about half the length of the closed wing and 20 mm. shorter than the 2nd; tail short, much shorter than the wing and nearly even, the middle feathers not more than 1.5 mm. longer than the outer ones.

This specimen agrees in coloration with *P. affinis*, but has the head glossy black, and not brownish black; the tail is even and not rounded, and it is smaller in size. It resembles *P. palustris* in the coloration of the head and in having the tail even, but has the black patch on the throat larger and in shape like that in *P. ater*; the underparts are less uniform in coloration, and the black on the head extends further down to the back.

Measurements:—Total length 107–110 mm., extent 195–197, wing 61, bill 9–9.2, tarsus 14, tail 47–49.

Only two specimens were obtained in Shen-si, near the borders of Kan-su and Szechuen, and none were seen anywhere else.

PECILE DAVIDI (*op. cit.* p. 113, pl. ii. fig. 4).

♂ *ad.* Crown and nape deep black, rather dull; below the black nape a rufous band crosses the back, joining the red on the breast; back dark olive-brown, with a grey tinge; tail and wing like the back, externally margined with dull ochraceous; sides of the head and neck below the eye white; chin and throat dull black; rest of the underparts chestnut-red, the middle of the abdomen paler; 4th and 5th quills longest, the 6th nearly as long, the 2nd equal to the 9th or 10th, the 1st about 21 mm. shorter; legs plumbeous; iris dark brown; bill black. Sexes alike. Young birds differ in having the cheeks and ear-coverts yellowish and the bill black, with the edges of the mandibles paler.

Measurements:—♂. Length 120–130 mm., extent 200, wing 66–67, bill 9.5–11, tarsus 15, tail 50–54. ♀. Length 115–125 mm., extent 197–202, wing 64–67, bill 9.5–11, tarsus 14–15.5, tail 50–51.

Specimens were obtained near the village of Satani in November, the village of Yo-dzam-pu in June, July, and August, the village of Totani in September and October, and near Chago in December. Mr. Berezovsky met with this Titmouse only in the mountains of S.W. Kan-su, where it is rare, occurring in small parties of five to ten individuals on the outskirts of the forest in valleys at an altitude of 7000 to 9000 feet. In habits it is a typical *Pæcile*, very agile, tame, and trustful. Its note resembles that of *P. affinis*, but is harsher and more discordant.

SITTA PRZEWALSKII (*op. cit.* p. 119).

♂ *ad.* Forehead, crown, and nape deep blue-black; upper parts deep slate-blue, the rump rather paler; wings blackish, externally margined with dark slate-blue; central rectrices like the back, the remainder black tipped with slate-blue, the outer ones with a subterminal white patch on the inner web; chin, sides of the head, and neck dull white, tinged with rusty rufous; rest of the underparts ochreous, the sides of the breast and the flanks rusty chestnut; upper mandible black, lower mandible greyish, with the tip dark; iris very dark brown; legs dark brown. Third and 4th quills nearly equal and longest, the 5th rather shorter by about 3 mm.; $2 > 6 < 5$; 1st about half the length of the closed wing and 39 mm. shorter than the longest quill; tail short, slightly emarginate, the middle tail-feathers 1-2 mm. shorter than the inner ones. Total length 125 mm., extent 225, wing 73, bill 17, tarsus 18, tail 43.

Only one specimen was obtained in the gorge of the River Yo-dzam-pu, in the district of Ming-djau, in July. It was in the outskirts of the forest, on the summit of the ridge between two valleys, and was on a dry dead branch, whence it darted into the air in pursuit of insects, like a Flycatcher. This species is very close to *Sitta leucopsis*, differing, it would seem, only in being smaller and in having almost the entire underparts strongly rufescent.